

**REMARKS**

Claims 1, 2, 4-9 and 11-18 are pending in the application.

The Office Action Summary sheet indicates that claim 4 is withdrawn from consideration. However the Office Action Summary is incorrect in this regard. Claim 4 has been canceled. Applicants respectfully request clarification for the record.

Claims 1, 2, 5-9 and 11-18 are rejected.

Claim 1 is amended herein to recite that  $R^2$  in formula (I) is a saturated hydrocarbon group having 1-20 carbon atoms. Support for the amendment is found, for example, in the original claims. No new matter is presented.

**I. Response to Claim Rejections based on Andrews**

Claims 1-2 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Andrews (US Patent No. 4,293,674).

Claims 5-9 and 11-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews (US Patent No. 4,293,674) as applied to claims 1 and 2 above, in view of Alger (Polymer Science Dictionary, 1 ed., Elsevier; 1989).

The Examiner asserts that Andrews teaches a dieny methacrylate, a curable compound of formula  $CH_2=C(CH_3)CO_2R$ , wherein R is an alkadienyl or cyclodienyl group which contains the 1,3- or 1,4-diene carbon skeleton, homopolymers and copolymers of the compound, and curable finishes containing the homopolymer and/or copolymer. See Abstract and column 1, lines 53-54.

Alger is relied upon as providing definition of photopolymerization, and teaching the use of photosensitizer in photopolymerization.

Applicants respectfully traverse.

As noted above, claim 1 is amended herein to recite that  $R^2$  in formula (1) is a saturated hydrocarbon group having 1-20 carbon atoms. On the other hand, the polymers disclosed by Andrews have a diene moiety in the side chain. Thus, the polymers of Andrews which have a unsaturated hydrocarbon group at the portion corresponding to  $R^2$  in formula (1) are not within the scope of present claim 1. For at least this reason, the present invention as recited in claim 1 is not anticipated by Andrews.

Applicants further submit that Andrews does not disclose, teach or suggest the feature of the present invention that the photochemically refractive-index-changing polymer has a number-average molecular weight of 20,000 or higher. The polymerization method of Andrews is different from that of the present invention and, therefore, the number-average molecular weight of the polymer of Andrews is different from that of the present invention as recited in amended claim 1. For example, Examples 1 to 3 in the present specification<sup>1</sup> show the polymer having a number-average molecular weight of 35,900-77,000. On the other hand, as can be seen from the examples in Table 2 of Andrews, the number-average molecular weight of the polymers is 7,500 to 16,000. For at least this reason, claim 1 is not anticipated by Andrews.

Additionally, Andrews discloses polymers for curable films having good hardness and gloss. Andrews does not describe crosslinking of the polymers. Further, Andrews does not suggest the use of polymers of a molecular weight of 20,000 or higher. Thus, the subject matter

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<sup>1</sup> Applicants note that the Examiner mistakenly stated in the Response to Arguments, at page 2, second paragraph, of the Action dated November 7, 2008, that “the Applicants state that examples 1 to 3 in the disclosure of Andrew show the polymer having a number-average molecular weight of 35,900 to 77,000”. Instead, the Applicants stated that examples 1 to 3 in the present specification show a polymer having a number-average molecular weight of 35,900 to 77,000. Clarification of the record is respectfully requested.

of present claim 1 is also unobvious over Andrews. Alger fails to remedy the deficiencies of Andrews.

Accordingly Applicants respectfully request withdrawal of the rejections.

## **II. Response to Claim Rejection based on Yanagase et al**

Claims 17 and 18 were rejected in the previous Office Action under 35 U.S.C. § 102(b) as being anticipated by Yanagase et al (U. S. Patent No. 6,160,070).

Applicants note that the Examiner did not include specific rejection of claims 17 and 18 in the detailed action in the present Office Action. However, Applicants consider that the Examiner intended to include the rejection since in the Examiner's response to Applicants' arguments, on page 4, second paragraph, of the present Action, the Examiner asserts that Applicants arguments were not persuasive. In this regard, the Examiner further states that the disclosure of Yanagase clearly envisions not only the formula as required by the applicant, but the specific compound as well.

Applicants traverse the rejection.

As previously noted, there is no specific working example which employs an acrylic vinyl monomer within the scope of formula (1) recited in the present claims. Vinyl methacrylate and vinyl acrylate are disclosed as specific examples in Yanagase at column 5, line 53 and 61, but one would have to pick and choose amongst the various methacrylate esters disclosed to arrive at the present invention and such picking and choosing is not permissible in a §102 anticipation rejection. In order to anticipate a claim under 35 U.S.C. § 102, a reference must disclose within the four corners of the document not only all of the elements claimed but also all of the elements arranged or combined in the same way as recited in the claim. *Net MoneyIn, Inc.*

*v. Verisign, Inc.*, 2008 U.S. App. LEXIS 21827, 1, 27 (Fed. Cir. 2008). For at least this reason the present invention is not anticipated by Yanagase.

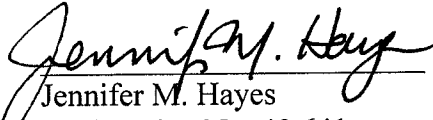
Accordingly, Applicants respectfully request withdrawal of the §102 anticipation rejection.

### III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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